EBIO 330: Insect Biology Lab

Instructor:
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Overview
This one-credit laboratory course focuses on understanding the biology of the world's most diverse animal group through collection, curation, and identification of insect specimens. All students enrolled in EBIO 330 must have previously taken or be simultaneously enrolled in EBIO 326 (Insect Biology lecture).

Course Learning Goals
By the end of the course, you will be expected to know:
---**The distinguishing characteristics of major insect groups**;
---**How entomological collections contribute to agricultural, ecological, and medical research**;
---**Why insects are important** including their ecological, economic, and cultural value; and
---**How insect diversity is distributed** both globally and locally.

By the end of the course, you will be expected to be able to:
---**Be familiar with basic field techniques for collecting and preserving insects**;
---**Prepare insect specimens for identification** using techniques appropriate for each group; and
---**Use a dichotomous key** to identify insects to order and in some cases to family or subfamily.

Textbook
The lab practical exam and all insect identification will be based on the following text (a few copies are available in the lab but students are encouraged to purchase their own copy).

> Triplehorn, C. A., & Johnson, N. F. (2005). *Borror and DeLong's Introduction to the Study of Insects* Belmont, CA: Thomson Brooks/Cole.

Course Website
Additional readings, assignment instructions, other course documents, and announcements will be posted on the course's Owl-Space site: https://owlspace-ccm.rice.edu/portal/site/EBIO-330-001-F14

Fieldtrips
We will have one on-campus and two off-campus collecting trips in which students will have opportunities to add to their collections. **Attendance in all collecting trips is mandatory.** We will also visit the entomology collection at Texas A&M University; **attendance on this fieldtrip is also mandatory**.

Insect Collections
Students will work in teams of two. Each team will assemble a collection of insects that they personally collect (i.e. you may not obtain specimens from another person) and identify to Family (or below) and submit their collection as part of their final lab grade. Your instructors will provide guidance but it is expected that much of the work for this course will be executed independently. It is further expected that both members of a team will contribute equally to the collection; failure to contribute one's fair share will influence one's participation grade. Both members of each team will receive the same grade for their collection. Students enrolled in EBIO 330 will have access to ABL 125 and the insect collection materials therein. Collection materials that leave the lab must be signed out and signed back in.

Course schedule (subject to change)
The class meets in the EEB Teaching Lab (ABL 125) on Friday afternoons. On off-campus collecting trip days (9/26, 10/10, 10/24, 11/21) we will meet in ABL 125 at **noon** and return by 10 PM. Details regarding fieldtrips will be discussed during the first meeting. "Open labs" are periods when your instructors will be available for help with identification and curation. Attendance of open labs is strongly encouraged but not required (historically, students who attend the open lab periods produce higher-quality collections and thus higher grades). Details regarding fieldtrips will be discussed during the first meeting.

Date	Activity (subject to change)	Location
29-Aug	Introductory meeting	ABL 125
5-Sep	On-campus collecting trip	Campus
12-Sep	Curation workshop	ABL 125
19-Sep	Identification workshop 1	ABL 125
26-Sep	Off-campus collecting trip 1	Memorial Park
3-Oct	Open lab	ABL 125
10-Oct	Off-campus collecting trip 2	Cook's Branch
17-Oct	Open lab	ABL 125
24-Oct	Identification workshop 2	ABL 125
31-Oct	Open lab	ABL 125
7-Nov	Open lab	ABL 125
14-Nov	Lab practical exam	ABL 125
21-Nov	Fieldtrip to TAMUIC; reports due	College Station, TX
28-Nov	No class (Thanksgiving)	
5-Dec	Collections due, lab party	ABL 125

Grading
Grades will be calculated out of a total of 500 points (see breakdown below).

Assignment	Points	% of final grade
Insect collection	200	40%
Written report	100	20%
Lab practical exam	100	20%
Participation	100	20%
Total	**500**	**100%**

Disabilities
Any student with a disability requiring accommodations in this class is encouraged to speak with me within the first two weeks of class and also contact the Director of Disabled Student Services in the Ley Student Center.

Honor Code
Collaboration with classmates is encouraged in this class. However, any use of outside resources (including published and unpublished research, websites, or personal communication) should be clearly communicated to the instructor. Any questions about a potential violation of the Rice University Honor Code should be brought to my attention immediately.